

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,889	10/701,889 11/05/2003		R. Mark Halligan	7208-90742	7856
24628	7590	11/14/2005		EXAMINER	
WELSH &	KATZ, LT	D	BOYCE, ANDRE D		
120 S RIVER	RSIDE PLA	ZA			
22ND FLOO	R		ART UNIT	PAPER NUMBER	
CHICAGO,	IL 60606		3623		

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summan	10/701,889	HALLIGAN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Andre Boyce	3623					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on 22 Au	aust 2005.						
	action is non-final.						
<u>'</u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
• •	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
·	, , , , , , , , , , , , , , , , , , , ,						
Disposition of Claims							
4)⊠ Claim(s) <u>1-52</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
	6) Claim(s) 1-52 is/are rejected.						
7) Claim(s) is/are objected to.		·					
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.							
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
The state of the s							
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
1) Untice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal Pa	atent Application (PTO-152)					
Paper No(s)/Mail Date S. Patent and Trademark Office	6)						

DETAILED ACTION

Response to Amendment

- This Final Office action is in response to Applicant's amendment filed August 22, 2005. Claims 1-4 and 27-52 have been amended. Claims 1-52 are pending.
- 2. The previously pending rejections to claims 1, 2, 5, 8, and 11-26 under 35 USC § 101 have been withdrawn.
- 3. Applicant's arguments filed August 22, 2005 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz et al (US 2003/0158745), in view of Jacobsen et al (USPN 6,167,397).

As per claim 1, Katz et al disclose a method of discovering trade secrets of an organization (i.e., system for a company to develop and maintain intellectual capital, ¶ 0005), such method comprising the steps of: collecting sets of descriptive information about potential trade secrets through an input

Page 3

Application/Control Number: 10/701,889

Art Unit: 3623

device of a computer from a plurality of persons of the organization (i.e., user enters information regarding new innovation via tab 500, ¶ 0040), and generating a report containing the non-redundant descriptive information about potential trade secrets of the organization (i.e., innovations folder 600, containing one entry for each innovation, ¶ 0043). Katz et al does not disclose analyzing the collected sets of descriptive information about potential trade secrets using logical and mathematical formulae to identify and eliminate any redundancy among the sets of descriptive information about potential trade secrets to define a collection of descriptive information about potential trade secrets of the organization. Jacobsen et al discloses an algorithm for clustering of documents (i.e., trade secret information) matching queries based on occurrence of terms, whereby weighing the terms using a standard measure results in identification of a small number of clusters (i.e., defining a collection of similar documents, column 2, lines 46-52). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the elimination of redundancy via the clustering of documents in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claim 2, Katz et al disclose correlating among the sets of descriptive information about potential trade secrets having at least some

Art Unit: 3623

redundant entries to identify sets of descriptive information about potential trade secrets that are related by redundancy and sets of descriptive information about potential trade secrets that are unrelated (i.e., the innovation query page 1200 allows the user to execute searches based upon various attributes of the abstract, ¶ 0050). Katz et al does not explicitly disclose integrating redundant entries among the respective sets into compiled sets of descriptive information about potential trade secrets with non-redundant entries that together with the sets of descriptive information about potential trade secrets with unrelated entries define a collection of descriptive information about potential trade secrets. Jacobsen et al provides for clustering of documents (i.e., trade secret information) matching queries based on occurrence of terms, whereby weighing the terms using a standard measure results in identification of a small number of clusters (i.e., defining a collection of similar documents, column 2, lines 46-52). Further, Jacobsen et al disclose an infrequent matching, where a document and record may be joined based on a high probability of being semantically related (column 7. lines 6-10). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include integrating redundant entries with non-redundant entries in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

Page 5

Art Unit: 3623

As per claims 3 and 6, Katz et al disclose conducting interviews of each person of the plurality of persons over an electronics communications network (e.g., information acquired from users via network 10, ¶ 0033).

As per claim 4, Katz et al disclose downloading a web form containing a plurality of information entry fields that request trade secret information from each person of the plurality of persons (i.e., users accesses web pages via user interface and access new innovation page 500, ¶¶ 0039, 0043).

As per claim 5, Katz et al disclose collecting information from each person of the plurality of persons regarding the identities of a plurality of other persons who may have information about the trade secrets of the organization (i.e., peernet access link 618 that allows users to locate and store profiles of professionals with expertise in the particular innovation, ¶ 0058).

As per claim 7, Katz et al disclose downloading a web form containing a plurality of information entry fields that request said identities from each person of the plurality of persons (i.e., users accesses web pages via user interface and access peernet access link 618 that allows users to locate and store profiles of professionals with expertise in the particular innovation, ¶¶ 0043, 0058).

As per claim 8, Katz et al disclose collecting information from each person of the plurality of persons regarding the locations of the trade secrets of the organization (i.e., locations of trade secrets may be found in innovations folder 600, ¶ 0043).

Art Unit: 3623

As per claim 9, Katz et al disclose conducting interviews of each person of the plurality of persons over an electronics communications network (i.e., user entered information, based on template of main page 40 and new innovation page 500, maintained by network administrator, ¶¶ 0038-39).

As per claim 10, Katz et al disclose downloading a web form containing a plurality of information entry fields that request said information on locations from each person of the plurality of persons (i.e., users accesses web pages via user interface and innovations folder 600, ¶¶ 0043-44).

As per claim 11, Katz et al disclose the step of correlating further comprises matching respective information entry fields of the plurality of fields of the trade secret information entries and marking trade secret information entries with matching fields as belonging to a single potential trade secret group (i.e., matched entries are listed in order of relevance to the search terms and saved in the internal abstracts folder based on the selected innovation, ¶ 0057).

As per claim 12, Katz et al disclose a field for a subject matter of the trade secret (i.e., abstract 1204, ¶0050).

As per claim 13, Katz et al disclose a field for a format of the trade secret (i.e., general classification 1214, ¶ 0050).

As per claim 14, Katz et al disclose a field for a product or service enhanced by the trade secret (i.e., applications, ¶ 0050).

As per claim 15, Katz et al disclose the step of correlating further comprises performing key word searching of the plurality of fields of each

Art Unit: 3623

potential trade secret group (i.e., user submits search query S104 and determines where to search S106, figure 14).

As per claim 16, Katz et al does not disclose improving the performance of said correlation by replacing any keywords encountered that are associated with a corresponding master keyword in a table of synonym keywords with the corresponding master keyword. Jacobsen et al disclose an attribute/value index, wherein a collection of attributes is stored (i.e., master index) and matched at a later time, similar to a table to synonym keywords. In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a table of synonym keywords in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 17-18, Katz et al does not disclose subdividing each potential trade secret group into more specific sub-groups based on the analysis of keywords contained in the plurality of fields and where each sub-group has at least a predefined number of keywords in common. Jacobsen et al disclose documents clusters created and scored based upon the diversity of matches of documents (column 3, lines 12-15). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz

Art Unit: 3623

et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the analysis of keywords where each sub-group has at least a predefined number of keywords in common in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 19-20, Katz et al does not disclose using common keywords. from keyword fields of multiple potential trade secret entries and using noncommon keywords and their frequency of occurrence in the keyword field of multiple potential trade secret entries being integrated as a common/noncommon keyword field in the resulting non-redundant trade secret entry. Jacobsen et al disclose determining the similarity between documents by determining the co-occurrence of infrequently occurring (i.e., non-common) terms in the vicinity of query (i.e., common) keywords (column 3, lines 63-67). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include using common and non-common keywords and their frequency of occurrence in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 21-23, Katz et al does not disclose forming predetermined mathematical quantities, an arithmetic mean, or a standard deviation to

Art Unit: 3623

represent a characteristic value and an error range for each numerical field of the plurality of trade secret entries being integrated. Jacobsen et al disclose using statistically and logarithm analysis to achieve a flattening effect that gives importance to the number of term occurrences (column 3, lines 37-41). In addition, Jacobsen et al discloses the clustering of documents employed as a post search analytical tool (column 6, lines 19-23), thereby supplementing the Katz et al innovations query page 1200 (¶ 0050). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include forming predetermined mathematical quantities, an arithmetic mean, or a standard deviation to represent a characteristic value and an error range in Katz et al, as seen in Jacobsen et al, as an efficient means of searching in a set of structured documents.

As per claims 24-26, Katz et al disclose generating data mining signatures, content filtering signatures, or electronic document scanning signatures from the collected trade secret information, or by the results of logical or mathematical formulae applied thereto (i.e., various levels of access determine how much of each entry can be viewed, based upon password and user-defined access control, ¶¶ 0034, 0041).

Claims 27-52 are rejected based upon the rejection of claims 1-26, since they are the programmed computer claims corresponding to the method claims.

Art Unit: 3623

Response to Arguments

6. In the Remarks, Applicant asserts that Katz et al does not teach or suggest the discovery or handling of redundancy. Applicant then discusses claims 1 and 2 of Katz et al, along with figures 8, 13, and 15, none of which have been relied upon by the Examiner in the rejection of the present claims. Applicant goes on to argue that nothing in Katz et al addresses the issue of multiple people entering the same innovation, or any method of finding or reducing any resulting redundancy. The Examiner respectfully disagrees with Applicant's assertions. First, it is noted that the Applicant has not pointed to what portions of the claim language he alleges is not taught by Katz et al in view of Jacobsen et al. A general allegation with respect to redundancy, that does not point to specific claim language, does not rebut a prima facie case of obviousness. Further, the Examiner submits that Katz et al discloses matching entries listed in order of relevance to search terms (¶ 0057). As such, Katz et al would indeed correlate among sets of descriptive information about potential trade secrets having at least some redundant entries, since all the matching entries of relevance would be listed. In other words, redundant entries would necessarily be listed in the results.

Applicant also argues that since Jacobsen et al does not deal with exact matches, either among the search query or among the search results, Jacobsen et al is clearly incapable of eliminating duplicates. Further, Applicant adds that since Jacobsen does not deal with exact matches, there would be no reason to eliminate documents. The Examiner respectfully

Art Unit: 3623

disagrees and submits that Jacobsen et al discloses clustering documents, based upon a query, that share common terms (column 2, lines 46-50 and column 3, lines 8-12). As such, Jacobsen et al necessarily clusters highly similar (or identical) documents. Further, Jacobsen et al discloses document clustering techniques, wherein the set of all documents in the cluster considered together is a better answer in determining matches for queries (columns 5-6, lines 66-8). Therefore, Jacobsen et al indeed eliminates redundancy via clustering of similar documents. In other words, similar documents are clustered as one single document for querying purposes, thus eliminating redundancy.

Applicant also argues that since there is no mechanism to eliminate duplicates, the combination of Katz et al and Jacobsen et al fails to teach each and every limitation. The Examiner respectfully disagrees and refers Applicant to the above response, with respect to Jacobsen et al.

Lastly, Applicant argues that the combination of Katz et al and Jacobsen et al would render Katz et al inoperative for its intended use. The Examiner respectfully disagrees and submits that Jacobsen et al explicitly discloses being employed as a post-search analytical tool, operating on search results (column 6, lines 19-23)

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Page 12

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571) 272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adb

November 4, 2005

TARIO R. HAFIZ
SUPERVISORY PATENT EXAMINER

Page 13